

Work-Order ID 61925-1

PRELIMINARY ISSUE

Thursday, September 09, 2010 12:54:33 PM

Page 1

Item ID: D4180-3

Accept

Revision ID: PRELIM

Item Name: Gusset

Start Date: 9/9/2010 Start Qty: 2.00

Required Date: 9/16/2010 Req'd Qty: 2.00

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D4180

PA1

100

0.00



Waterjet

FLOW CNC Waterjet

Memo

1-Cut as per Dwg

Dwg Rev: PA1

Prog Rev: PM

2-Deburr if necessary

0.00

10-9-13

4

110

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Quality Control

Memo

0.00

10-9-13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 61925

Thursday, September 09, 2010 12:54:33 PM



Page 2

Item ID: D4180-3

Accept



Setup Start



Revision ID: PRELIM

Stop



Item Name: Gusset

Start Date: 9/9/2010 Start Qty: 2.00



Cust Item ID:

Required Date: 9/16/2010 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120  QC Quality Control	QC8- Inspect parts - second check  Memo	0.00 - 8/10/09/13 0.00 inspector to PA Dug only							
130  Brake NC Brake NC	Bend as per dwg  Memo	0.00 0.00		8/10/09/14					
140  QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00 - inspector to PA Dug only 0.00 S. 10/09/14							

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 61925

Thursday, September 09, 2010 12:54:33 PM



Page 3

Item ID: D4180-3

Accept



Setup Start



Revision ID: PRELIM

Stop



Item Name: Gusset

Start Date: 9/9/2010 Start Qty: 2.00



Cust Item ID:

Required Date: 9/16/2010 Req'd Qty: 2.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

150

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

160

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

170

Identify as per dwg & Stock Location: CA

0.00



Packaging

Memo

0.00

Packaging

7/11 10/09/16

4 0

BR 10 9-16

4 0

Ian

BT 10-09-23

61925



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 61925

Thursday, September 09, 2010 12:54:33 PM



Page 4

Item ID: D4180-3

Accept



Setup Start



Revision ID: PRELIM

Stop



Item Name: Gusset

Start Date: 9/9/2010 Start Qty: 2.00



Cust Item ID:

Required Date: 9/16/2010 Req'd Qty: 2.00

Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/09/29 *[Signature]*

U10-09.23

POSITIVE RECALL

EFFECTIVE 10.9.09 AUTH h

RELEASED [Signature] DATE 10.09.29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

Thursday, September 09, 2010 12:54:38 PM

Page 1

Work Order ID: 61925



Parent Item: D4180-3



Parent Item Name: Gusset


Start Date: 9/9/2010

Required Date: 9/16/2010

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A 10.09.09 new issue DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.125  6061-T6 .125 Sheet		Purchased	No			100	sf	125.2600	0.114	0.24			



1810-4 13

Location

Loc Qty

Loc Code

MAT21

125.26

113608

96

114352

29.26

114352

(4)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

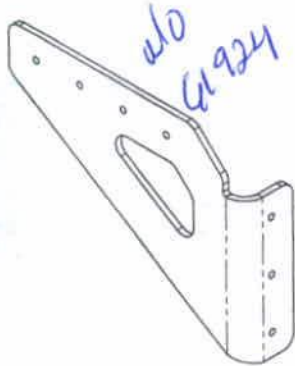
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

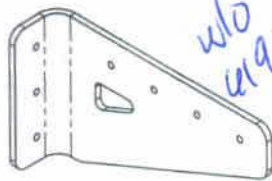
**NOTE:** Date & initial all entries

Route / Born / ArF  
 → ADWE

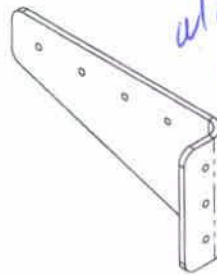
2 order



D4180-1 GUSSET

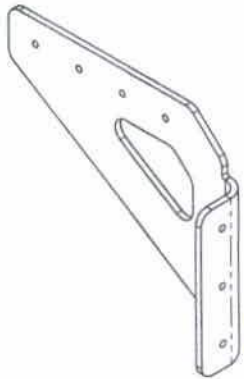


D4180-3 GUSSET

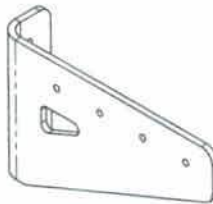


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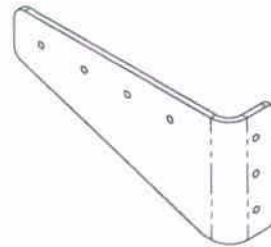
SHOP COPY  
 RETURN TO  
 ENGINEERING  
 UNCONTROLLED COPY  
 SUBJECT TO AMENDMENT  
 WITHOUT NOTICE  
 WORK ORDER  
 NO. 41925  
 P/10-9-09



D4180-2 GUSSET



D4180-4 GUSSET



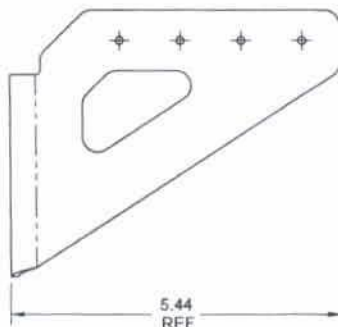
D4180-6 GUSSET

PRELIMINARY ISSUE  
 10.09.08

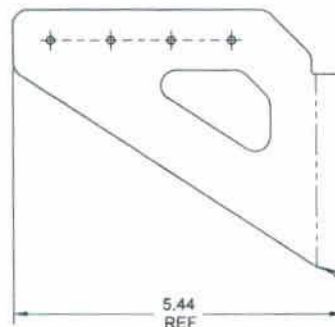
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REV.			BY	DATE
DESIGN				
DRAWN				
CHECKED				
MFG. APPR.				
APPROVED				
DE APPR.				
DATE	10.09.03			

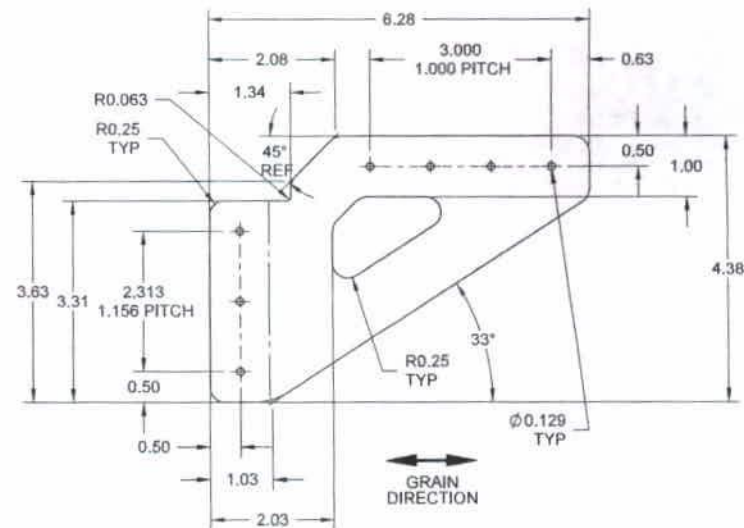
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D4180	REV: PA1 SHEET 1 OF 4
TITLE POD FRAME GUSSETS	SCALE NTS
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**D4180-2 GUSSET**  
MAKE FROM D4180-1F



**D4180-1 GUSSET**  
MAKE FROM D4180-1F



**D4180-1F GUSSET FLAT PATTERN**

**NOTES:**

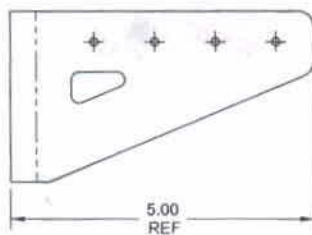
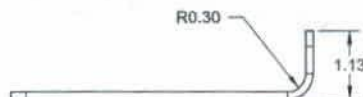
- 1) MATERIAL: 6061-T61/T62 ALUMINUM SHEET, 0.125 THICK PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 REF. DART SPEC. M8061T6S.125
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.19 lbs EACH

**PRELIMINARY ISSUE**

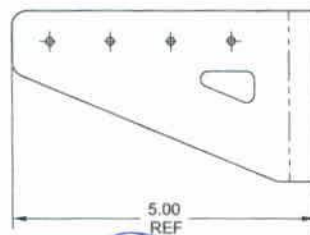
10.09.08

*also 6/9/08*

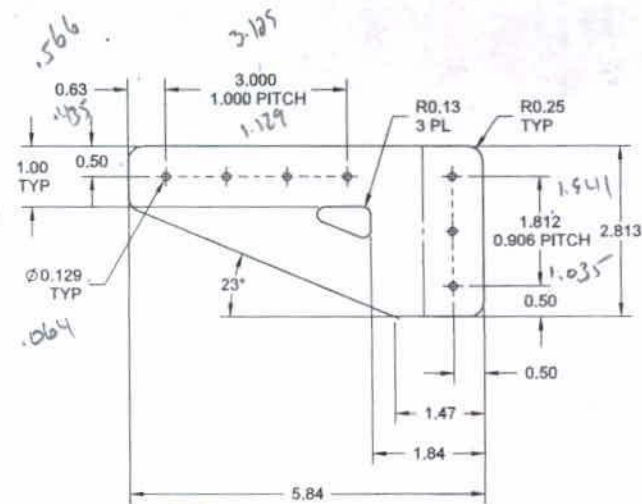
DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. PA1
MFG. APPR.		<b>D4180</b>	SHEET 2 OF 4
APPROVED		TITLE	SCALE
DE APPR.		<b>POD FRAME GUSSETS</b>	NTS
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**D4180-4 GUSSET**  
MAKE FROM D4180-3F



**D4180-3 GUSSET**  
MAKE FROM D4180-3F



**D4180-3F GUSSET FLAT PATTERN**

*WLOU925*

**PRELIMINARY ISSUE**  
10.09.08

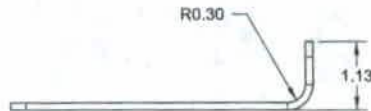
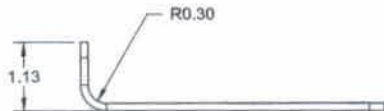
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  - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: NONE
  - 7) WEIGHT: 0.15 lbs EACH

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. PA1
MFG. APPR.		<b>D4180</b>	SHEET 3 OF 4
APPROVED		TITLE	SCALE
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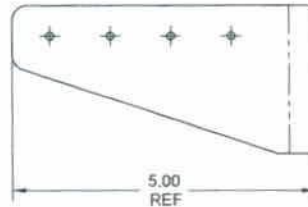
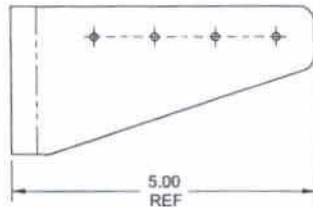


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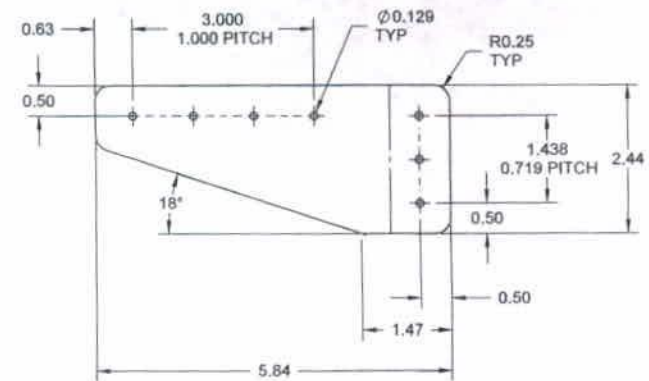


C



**D4180-5 GUSSET**  
MAKE FROM D4180-5F

**D4180-6 GUSSET**  
MAKE FROM D4180-5F



**D4180-5F GUSSET FLAT PATTERN**

W/O 41925

**PRELIMINARY ISSUE**  
10.09.08

**NOTES:**

- 1) MATERIAL: 6061-T61/T62 ALUMINUM SHEET, 0.125 THICK PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 REF. DART SPEC. M6061T6S.125
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.13 lbs

DESIGN		<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN		DRAWING NO.	REV. PA1
CHECKED		<b>D4180</b>	SHEET 4 OF 4
MFG. APPR.		TITLE	SCALE
APPROVED		<b>POD FRAME GUSSETS</b>	NTS
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A

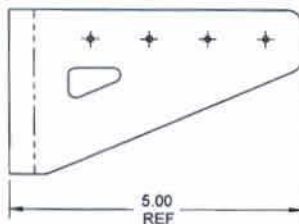
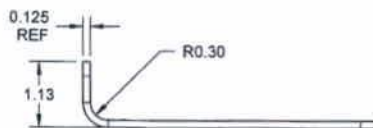
B

C

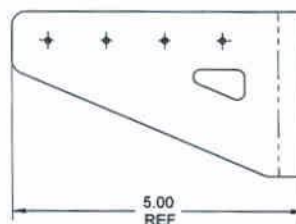
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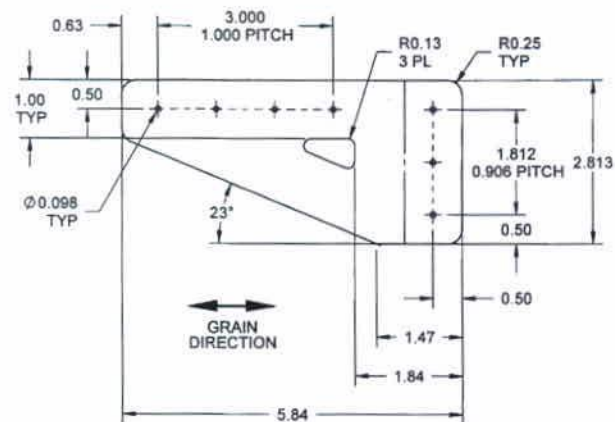




**D4180-4 GUSSET**  
MAKE FROM D4180-3F



**D4180-3 GUSSET**  
MAKE FROM D4180-3F



**D4180-3F GUSSET FLAT PATTERN**

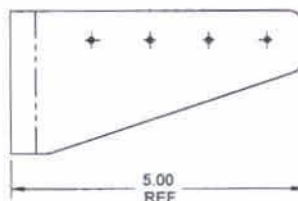
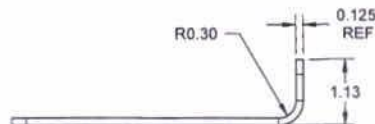
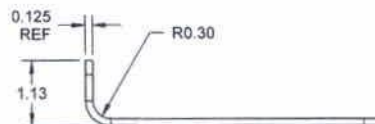
**NOTES:**

- 1) MATERIAL: 6061-T61/T62 ALUMINUM SHEET, 0.125 THICK PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 REF. DART SPEC. M6061T6S.125
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.15 lbs EACH

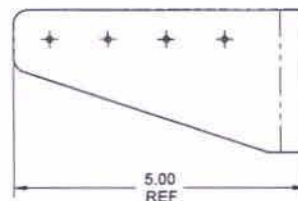
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DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		<b>D4180</b>	SHEET 3 OF 4
APPROVED		TITLE	SCALE
DE APPR.		<b>POD FRAME GUSSETS</b>	NTS
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**RELEASED**  
2010-09-29

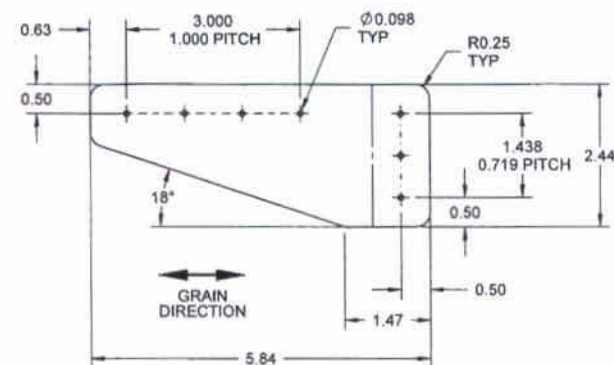
61925



**D4180-5 GUSSET**  
MAKE FROM D4180-5F



**D4180-6 GUSSET**  
MAKE FROM D4180-5F



**D4180-5F GUSSET FLAT PATTERN**

**RELEASED**  
2010-09-29

**NOTES:**

- 1) MATERIAL: 6061-T61/T62 ALUMINUM SHEET, 0.125 THICK PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 REF. DART SPEC. M6061T6S.125
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.13 lbs

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		<b>D4180</b>	SHEET 4 OF 4
APPROVED		TITLE	SCALE
DE APPR.		<b>POD FRAME GUSSETS</b>	NTS
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